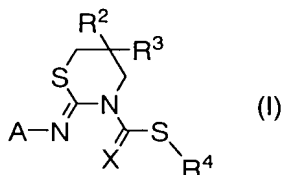


CLAIMS

1. A compound represented by the formula (I):



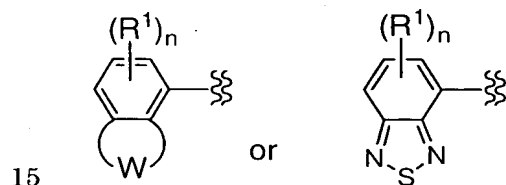
- 5 wherein R² and R³ are the same or different and each is C2-C4 alkyl, C2-C4 alkenyl, C1-C4 alkoxyC1-C4 alkyl, optionally substituted aminoC1-C4 alkyl, or C3-C6 cycloalkylC1-C4 alkyl; or

- R² and R³ are taken together with the adjacent carbon atom to form an optionally substituted 5 to 8 membered non-aromatic carbocyclic ring or an optionally substituted 5 to 8 membered non-aromatic heterocyclic ring;

R⁴ is C1-C6 alkyl, hydroxyC1-C6alkyl, optionally substituted aminoC1-C6alkyl, or C1-C6 alkoxyC1-C6 alkyl;

X is an oxygen atom or a sulfur atom;

A is the group of the formula:



- 15 wherein R¹ is, same or different, alkyl, alkoxy, alkylthio, optionally substituted amino, optionally substituted aryl, optionally substituted aryloxy, optionally substituted aralkyloxy, cycloalkyl, a halogen atom, hydroxy, nitro, haloalkyl, haloalkoxy, optionally substituted carbamoyl, carboxy, alkoxy carbonyl, alkylsulfinyl, alkylsulfonyl, alkoxyalkyl, alkylthioalkyl, optionally substituted aminoalkyl, alkoxyiminoalkyl, alkoxyalkoxy, alkylthioalkoxy, alkoxy carbonylalkoxy, carboxyalkoxy, alkylsulfonyloxy, optionally substituted heteroaryl, an optionally substituted non-aromatic heterocyclic group, cyano, cyanoalkoxy, or a group of the formula: -C(=O)-R^H wherein R^H is a hydrogen atom, alkyl, optionally substituted aryl, or an optionally substituted non-aromatic heterocyclic group;
- 20
- 25

W is C2-C6 alkylene which may contain an optionally substituted heteroatom(s) or C2-C4 alkenylene which may contain an optionally substituted heteroatom(s);

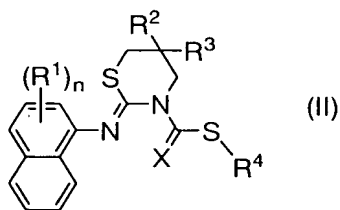
n is an integer of 0 to 7;

5 a pharmaceutically acceptable salt, or a solvate thereof.

2. The compound according to Claim 1 wherein R² and R³ are taken together with the adjacent carbon atom to form an optionally substituted 5 to 6 membered carbocyclic ring, a pharmaceutically acceptable salt, or a solvate thereof.

3. The compound according to Claim 1 or 2 wherein W is ·CH₂CH₂CH₂·, 10 ·CH₂CH₂CH₂CH₂·, ·OCH₂O·, ·OCH₂CH₂O·, ·N(CH₃)CH₂CH₂CH₂·, or ·CH=CH·CH=CH·, a pharmaceutically acceptable salt, or a solvate thereof.

4. A compound of the formula (II):



wherein R¹ is, same or different, alkyl, alkoxy, optionally substituted amino, a halogen 15 atom, hydroxy, haloalkyl, haloalkoxy, cyano, or alkoxycarbonylalkoxy;

each of R² and R³ is, same or different, C2-C4 alkyl; or

R² and R³ are taken together with the adjacent carbon atom to form 5 to 6 membered cycloalkane;

R⁴ is C1-C6 alkyl;

20 X is an oxygen atom or a sulfur atom;

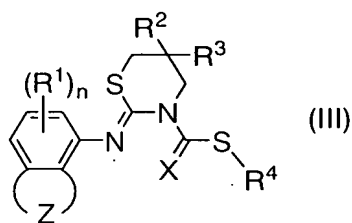
n is an integer of 0 to 7;

a pharmaceutically acceptable salt, or a solvate thereof.

5. The compound according to Claim 4 wherein R¹ is a fluorine atom, a chlorine atom, dimethylamino, cyano, or t-butoxycarbonylmethoxy, a pharmaceutically 25 acceptable salt, or a solvate thereof.

6. The compound according to Claim 4 or 5 wherein n is 0 or 1, a pharmaceutically acceptable salt, or a solvate thereof.

7. A compound of the formula (II):



wherein R¹ is, same or different, alkyl, alkoxy, optionally substituted amino, a halogen atom, hydroxy, haloalkyl, haloalkoxy, cyano, or alkoxycarbonylalkoxy;

5 each of R² and R³ is, same or different, C2-C4 alkyl; or

R² and R³ are taken together with the adjacent carbon atom to form 5 to 6 membered cycloalkane;

R⁴ is C1-C6 alkyl;

X is an oxygen atom or a sulfur atom;

10 Z is -CH₂CH₂CH₂-, -CH₂CH₂CH₂CH₂-, or -OCH₂CH₂O-;

n is an integer of 0 to 3;

a pharmaceutically acceptable salt, or a solvate thereof.

8. The compound according to Claim 7 wherein Z is -CH₂CH₂CH₂- or -CH₂CH₂CH₂CH₂-, a pharmaceutically acceptable salt, or a solvate thereof.

15 9. The compound according to Claim 7 wherein Z is -OCH₂CH₂O-, a pharmaceutically acceptable salt, or a solvate thereof.

10. The compound according to any one of Claim 7 wherein n is 0, a pharmaceutically acceptable salt, or a solvate thereof.

20 11. The compound according to any one of Claim 4 or 7 wherein R² and R³ are taken together with the adjacent carbon atom to form 6 membered cycloalkane, a pharmaceutically acceptable salt, or a solvate thereof.

12. The compound according to any one of Claims 1 and 3 to 10 wherein each of R² and R³ is, same or different, C2-C3 alkyl, a pharmaceutically acceptable salt, or a solvate thereof.

25 13. The compound according to any one of Claims 1 to 11 wherein R⁴ is methyl or ethyl, a pharmaceutically acceptable salt, or a solvate thereof.

14. A pharmaceutical composition which contains the compound according to any

one of Claims 1 to 13, a pharmaceutically acceptable salt, or a solvate thereof as an active ingredient.

15. A pharmaceutical composition which contains the compound according to any one of Claims 1 to 13, which has a cannabinoid receptor agonistic activity, a pharmaceutically acceptable salt, or a solvate thereof as an active ingredient,.

16. The pharmaceutical composition according to any one of Claim 14 or 15 which is useful for an analgesics.

17. The pharmaceutical composition according to any one of Claim 14 or 15 which is useful for a treating agent for algesic.

18. The pharmaceutical composition according to any one of Claim 14 or 15 which is useful for an antipruritics.

19. The pharmaceutical composition according to any one of Claim 14 or 15 which is useful for a bronchodilator,

20. A method for treating a disease related to a cannabinoid receptor which comprises administering the compound according to any one of Claims 1 to 13, a pharmaceutically acceptable salt, or a solvate thereof.

21. Use of the compound according to any one of Claims 1 to 13 for manufacturing a treating agent for a disease related to a cannabinoid receptor, a pharmaceutically acceptable salt, or a solvate thereof.